

CURRICULUM VITAE

MICHAEL H. WIGLER

EDUCATION:

- 1970 B.A., Mathematics, Princeton University, New Jersey.
- 1972 M.M.S., Medicine, Rutgers University, New Jersey.
- 1978 Ph.D., Microbiology, Columbia University, New York.

PROFESSIONAL BACKGROUND:

- 1973-1978 Graduate Research Assistant, Department of Microbiology, Columbia University, NY.
- 1978 Staff Associate, Institute of Cancer Research, Columbia University, NY.
- 1978-Present Professor, Mammalian Cell Genetics and Interim Chair, Quantitative Biology, Cold Spring Harbor Laboratory, NY.
- 1988-Present Adjunct Professor, Department of Genetics, College of Physicians and Surgeons, Columbia University, NY.
- 2008-2014 Foreign Adjunct Professor, Tumor Biology, Dept. of Oncology-Pathology at Karolinska Institutet, Stockholm Sweden.

AWARDS - HONORS:

- 1982 American Business for Cancer Research Award.
- 1985 Pfizer Biomedical Award.
- 1985 NIH Outstanding Investigator Award.
- 1986 American Cancer Society Lifetime Research Professorship Award.
- 1986 CIBA-GEIGY/Drew Award in Biomedical Research.
- 1998 Boyce Thompson Institute for Plant Research at Cornell University Award.
- 1989 Member of the National Academy of Sciences.
- 1989 Distinguished Alumni, University of Medicine & Dentistry of New Jersey.
- 1990 Lucy Wortham James Laboratory Basic Research Award, in Cancer Research.
- 1991 G.H.A. Clowes Memorial Award for Cancer Research.
- 1995 Katherine Berkan Judd Award, from Memorial Sloan-Kettering Cancer Center.
- 1997 American Academy of Microbiology.
- 1998 American Academy of Arts and Sciences.
- 1998 The Stevens Triennial Prize from Columbia University.
- 2007 Double Helix Award

SELECTED PATENTS (9 of 32):

Axel, R., Wigler, M.H., & Silverstein, S.J., Processes For Inserting DNA Into Eucaryotic Cells And For Producing Proteinaceous Materials, U.S. Patent No. 4399216 (1983)

Wigler, M.H. & Colicelli, J.J., Cloning By Complementation And Related Processes, U.S. Patent No. 5,527,896 (1996)

Still, C.W., Wigler, M.H., Ohlmeyer, M.H.J., Dillard, L.W., Reader, J.C. Complex Combinatorial Chemical Libraries Encoded With Tags, U.S. Patent No. 5,565,324 (1996)

Wigler M.H., Lisitsyn, N., Representational Approach To DNA Analysis, U.S. Patent No. 5,876,929 (1996)

Wigler, M.H. & Sorge, J.A., Method For Generating Libraries Of Antibody Genes Comprising Amplification Of Diverse Antibody Dnas And Methods For Using These Libraries For The Production Of Diverse Antigen Combining Molecules, U.S. Patent No. 5,780,225 (1998)

Wigler, M.H., Muthuswamy, L. & Sebat, J., Determining A Probabilistic Diagnosis Of Autism By Analysis Of Genomic Copy Number Variation, U. S. Patent No. 8,554,488 (2013)

Hicks, J et al., Varietal Counting Of Nucleic Acids For Obtaining Genomic Copy Number Information, US Patent No. 9,404,156, issued August 2, 2016 (Patent applications pending in US, EP and Canada)

Wigler, M & Levy, D., Random Nucleotide Mutation For Nucleotide Template Counting And Assembly, International Patent Application Publication No. WO 2016057947, April 14, 2016 (patent applications pending in US, EP, Australia, Israel)

Wigler, M, Levy, D., Wang, Z., Genetic Copy Number Determination Using High Throughput Multiplex Sequencing of Smashed Nucleotides, International Patent Application Publication No. WO2017044609, March 16, 2017

PUBLICATIONS: (Total 194)

1. Wigler, M.H. and Weinstein, I.B. (1975) A preparative method for obtaining enucleated mammalian cells. *Biochemical and Biophysical Research Commun.* 63: 669-674. PMID: 1169063
2. Wigler, M.H., Ford, J.P. and Weinstein, I.B. (1975) Glucocorticoid inhibition of fibrinolytic activity production by tumor cells. *Cold Spring Harbor Symp. on Proteases and Biological Control*, 849-856.
3. Wigler, M.H. and Weinstein, I.B. (1976) A tumor promoter induces plasminogen activator. *Nature*, 259: 232-233. PMID: 1250353
4. Wigler, M.H. and Axel, R. (1976) Nucleosomes in metaphase chromosomes. *Nucleic Acids Res.*, 3: 1463-1472. PMID: 958895
5. Wigler, M.H., Silverstein, S., Lee, L.S., Pellicer, A., Cheng, Y. and Axel, R. (1977) Transfer of purified herpes virus thymidine kinase gene to cultured mouse cells. *Cell*, 11: 223-232. PMID: 194704
6. Weinstein, I.B. and Wigler, M. (1977) Cell culture studies provide new information on tumour promoters. *Nature*, 270: 659-690.
7. Pellicer, A., Wigler, M., Axel, R. and Silverstein, S. (1978) The transfer and stable integration of the HSV thymidine kinase gene into mouse cells. *Cell*, 14: 133-141. PMID: 208776
8. Wigler, M., DeFeo, D. and Weinstein, I.B. (1978) Induction of plasminogen activator in cultured cells by macrocyclic plant diterpene esters and other agents related to tumor promotion. *Cancer Res.*, 38: 1434-1437. PMID: 639070
9. Wigler, M., Pellicer, A., Silverstein, S. and Axel, R. (1978) Biochemical transfer of single-copy eucaryotic genes using total cellular DNA as donor. *Cell*, 14: 725-731. PMID: 210957

10. Wigler, M., Pellicer, A., Silverstein, S., Axel, R., Urlaub, G. and Chasin, L. (1979) DNA-mediated transfer of the aprt locus into mammalian cells. *Proc. Natl. Acad. Sci. USA*, *76*: 1373-1376. PMID: 286319
11. Wigler, M., Sweet, R., Sim, G.K., Wold, B., Pellicer, A., Lacy, E., Maniatis, T., Silverstein, S., and Axel, R. (1979) Transformation of mammalian cells with genes from prokaryotes and eukaryotes. *Cell*, *16*: 777-785. PMID: 222468
12. Wold, B., Wigler, M., Lacy, E., Maniatis, T., Silverstein, S., and Axel, R. (1979) Introduction and expression of the rabbit β -globin gene in mouse fibroblasts. *Proc. Natl. Acad. Sci. USA*, *76*: 56-84. PMID: 293672
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14. Perucho, M., Hanahan, D., Lipsich, L. and Wigler, M. (1980) Isolation of the chicken thymidine kinase gene by plasmid rescue. *Nature*, *285*: 207. PMID: 6246445
15. Perucho, M., Hanahan, D. and Wigler, M. (1980) Genetic and physical linkage of exogenous sequences in transformed cells. *Cell*, *22*: 309-317. PMID: 6253083
16. Hanahan, D., Lane, D., Lipsich, L., Wigler, M. and Botchan, M. (1980) Characteristics of an SV40-plasmid recombinant and its movement into and out of the genome of a murine cell. *Cell*, *21*: 127-139. PMID: 6250708
17. Perucho, M. and Wigler, M. (1981) Linkage and expression of foreign DNA in cultured animal cells. *Cold Spring Harbor Symp. Quant. Biol.*, *45*: 829-838. PMID: 6942952
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19. Wigler, M.H. (1981) The inheritance of methylation patterns in vertebrates. *Cell*, *24*: 285-286. PMID: 7195315
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